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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,555	09/24/2004	Eric Veine	LC 0177 PUS	5554

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EXAMINER

WHITE, RODNEY BARNETT

ART UNIT PAPER NUMBER

3636

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/711,555

Applicant(s)

VEINE ET AL.

Examiner

Rodney B. White

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 10 and 12-20 is/are rejected.
- 7) ☒ Claim(s) 6, 8, 9 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

Claim 1 and 3 are objected to because of the following informalities: In claim 1, line 15, applicant repeats the word "restraint". One of them needs to be deleted. In claim 3, line 6, the word "restrain" should be - - restraint - -. Applicant should read through his application for other such typographical errors and correct them as needed. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 5, 10, and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Asai (U.S. Patent No. 4,278,291).

Asai teaches an automotive head restraint assembly for use in an automotive seat assembly having a seatbase defining a seatbase plane and a seatback defining a seatback plane, said automotive head restraint assembly comprising: a head restraint support member having at least one horizontal travel arm generally perpendicular to

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the seatback plane and a horizontal base arm; a head restraint inner structure engaging said at least one horizontal travel arm, said head restraint inner structure movable linearly to a plurality of positions along said at least one horizontal travel arm; and an active head restraint element mounted to said head restraint inner structure and said horizontal base arm, said active head restraint element movable between a stowed position and a deployed position, said active head restraint element moving said head restraint inner structure to a head restraint forward position in response to said active head restraint element moving into said deployed position, said active head restraint element deployed towards said deployed position during vehicle impact, a trigger element retaining said active head restraint element in said stowed position, said trigger element releasing said active head restraint element during vehicle impact, a plurality of uni-directional engagement notches formed on said at least one horizontal travel arm; and a locking arm mounted to said head restraint inner structure, said locking arm biased to engage said plurality of uni-directional engagement notches, said locking arm movable between a locking arm engagement position and a locking arm disengagement position, said locking arm disengagement position allowing said head restraint inner structure to be movable linearly to a plurality of positions along said at least one horizontal travel arm, said uni-directional engagement notches allowing said active head restraint element to move said head restraint inner structure to said head restraint forward position while said locking arm is in said locking arm engagement position..

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Claims 1-2, 10, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Fohl (U.S. Patent No. 5,882,071).

Fohl teaches an automotive head restraint assembly for use in an automotive seat assembly having a seatbase defining a seatbase plane and a seatback defining a seatback plane, said automotive head restraint assembly comprising: a head restraint support member having at least one horizontal travel arm generally perpendicular to the seatback plane and a horizontal base arm; a head restraint inner structure engaging said at least one horizontal travel arm, said head restraint inner structure movable linearly to a plurality of positions along said at least one horizontal travel arm; and an active head restraint element mounted to said head restraint inner structure and said horizontal base arm, said active head restraint element movable between a stowed position and a deployed position, said active head restraint element moving said head restraint inner structure to a head restraint forward position in response to said active head restraint element moving into said deployed position, said active head restraint element deployed towards said deployed position during vehicle impact, a trigger element retaining said active head restraint element in said stowed position, said trigger element releasing said active head restraint element during vehicle impact.

Claims 1-2, 5, 10, and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Meyer et al (U.S. Patent No. 6,017,086).

Meyer et al teach an automotive head restraint assembly for use in an automotive seat assembly having a seatbase defining a seatbase plane and a seatback defining a seatback plane, said automotive head restraint assembly comprising: a head

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restraint support member having at least one horizontal travel arm generally perpendicular to the seatback plane and a horizontal base arm; a head restraint inner structure engaging said at least one horizontal travel arm, said head restraint inner structure movable linearly to a plurality of positions along said at least one horizontal travel arm; and an active head restraint element mounted to said head restraint inner structure and said horizontal base arm, said active head restraint element movable between a stowed position and a deployed position, said active head restraint element moving said head restraint inner structure to a head restraint forward position in response to said active head restraint element moving into said deployed position, said active head restraint element deployed towards said deployed position during vehicle impact, a trigger element retaining said active head restraint element in said stowed position, said trigger element releasing said active head restraint element during vehicle impact (column 4, lines 8-67, column 5, lines 1-67, and column 6, lines 1-28), a plurality of uni-directional engagement notches formed on said at least one horizontal travel arm; and a locking arm mounted to said head restraint inner structure, said locking arm biased to engage said plurality of uni-directional engagement notches, said locking arm movable between a locking arm engagement position and a locking arm disengagement position, said locking arm disengagement position allowing said head restraint inner structure to be movable linearly to a plurality of positions along said at least one horizontal travel arm, said uni-directional engagement notches allowing said active head restraint element to move said head restraint inner structure to said head restraint forward position while said locking arm is in said locking arm engagement position..

Claims 1-2 , 7, 10, and 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Schafer et al (U.S. Patent Application Publication No. 2003/0057748 A1).

Schafer et al teaches an automotive head restraint assembly for use in an automotive seat assembly having a seatbase defining a seatbase plane and a seatback defining a seatback plane, said automotive head restraint assembly comprising: a head restraint support member having at least one horizontal travel arm generally perpendicular to the seatback plane and a horizontal base arm; a head restraint inner structure engaging said at least one horizontal travel arm, said head restraint inner structure movable linearly to a plurality of positions along said at least one horizontal travel arm; and an active head restraint element mounted to said head restraint inner structure and said horizontal base arm, said active head restraint element movable between a stowed position and a deployed position, said active head restraint element moving said head restraint inner structure to a head restraint forward position in response to said active head restraint element moving into said deployed position, said active head restraint element deployed towards said deployed position during vehicle impact, a trigger element retaining said active head restraint element in said stowed position, said trigger element releasing said active head restraint element during vehicle impact, wherein said active head restraint element comprises a hinge element, said hinge element movable between a hinge folded position and a hinge unfolded position, said hinge folded position corresponding to said stowed position..

Claims 1-4 , 7, 10, and 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Veine et al (U.S. Patent Application Publication No. 2003/0160481 A1).

Veine et al teaches an automotive head restraint assembly for use in an automotive seat assembly having a seatbase defining a seatbase plane and a seatback defining a seatback plane, said automotive head restraint assembly comprising: a head restraint support member having at least one horizontal travel arm generally perpendicular to the seatback plane and a horizontal base arm; a head restraint inner structure engaging said at least one horizontal travel arm, said head restraint inner structure movable linearly to a plurality of positions along said at least one horizontal travel arm; and an active head restraint element mounted to said head restraint inner structure and said horizontal base arm, said active head restraint element movable between a stowed position and a deployed position, said active head restraint element moving said head restraint inner structure to a head restraint forward position in response to said active head restraint element moving into said deployed position, said active head restraint element deployed towards said deployed position during vehicle impact, a trigger element retaining said active head restraint element in said stowed position, said trigger element releasing said active head restraint element during vehicle impact, a motion translation element 56 pivotably including a back translation portion mounted within the seatback, said motion translation element in communication with said trigger element such that said trigger element releases said active head restraint in response to said back translation portion moving into a back intrusion position.



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Claims 1-2, 7, 10, and 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Schafer et al (U.S. Patent No. 6,623,073).

Schafer et al teaches an automotive head restraint assembly for use in an automotive seat assembly having a seatbase defining a seatbase plane and a seatback defining a seatback plane, said automotive head restraint assembly comprising: a head restraint support member having at least one horizontal travel arm generally perpendicular to the seatback plane and a horizontal base arm; a head restraint inner structure engaging said at least one horizontal travel arm, said head restraint inner structure movable linearly to a plurality of positions along said at least one horizontal travel arm; and an active head restraint element mounted to said head restraint inner structure and said horizontal base arm, said active head restraint element movable between a stowed position and a deployed position, said active head restraint element moving said head restraint inner structure to a head restraint forward position in response to said active head restraint element moving into said deployed position, said active head restraint element deployed towards said deployed position during vehicle impact, a trigger element retaining said active head restraint element in said stowed position, said trigger element releasing said active head restraint element during vehicle impact, wherein said active head restraint element comprises a hinge element, said hinge element movable between a hinge folded position and a hinge unfolded position, said hinge folded position corresponding to said stowed position.

***Claim Rejections - 35 USC § 103***

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asai.

Asai teaches an obvious use of the structure as claimed.

Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al.

Meyer et al teach an obvious use of the structure as claimed.

Claims 6, 8-9, and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Viano, et al, Wieclawski, Massara, Ruckert et al, Wiklund, Watanabe, Shah et al, Humer et al, Cho, Humer, Yoshizawa et al, Baumann et al, Neale, Haland et al, Klier et al, Lee, Farquhar et al, Nakano, and Svantesson, teach

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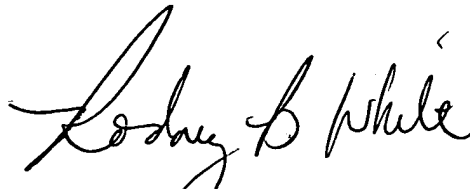
seats with headrests similar to the present invention that are actuated during crashes and impacts.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney B. White whose telephone number is (703) 308-2276.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on (703) 308-0827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rodney B. White,  
Patent Examiner  
Art Unit 3636  
November 15, 2004



**RODNEY B. WHITE**  
**PRIMARY EXAMINER**